Security Camera

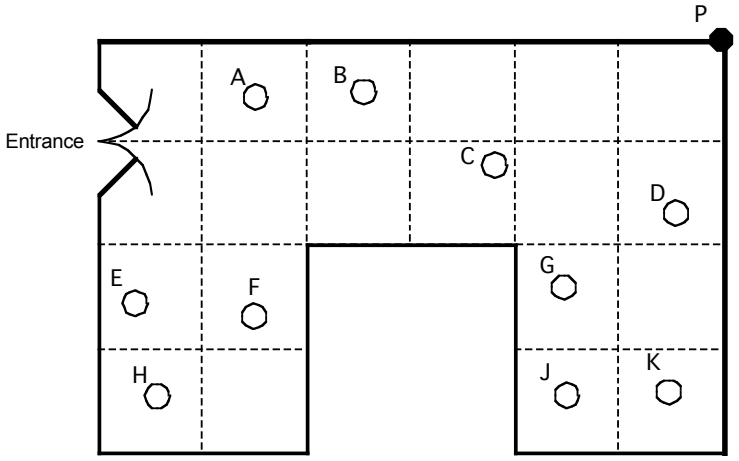
A shop owner wants to prevent shoplifting.

He decides to install a security camera on the ceiling of his shop.

The camera can turn right round through 360°.

The shop owner places the camera at point P, in the corner of the shop.

Plan view of the shop



1. The plan shows ten people who are standing in the shop.

   These are labelled A, B, C, D, E, F, G, H, J, K.

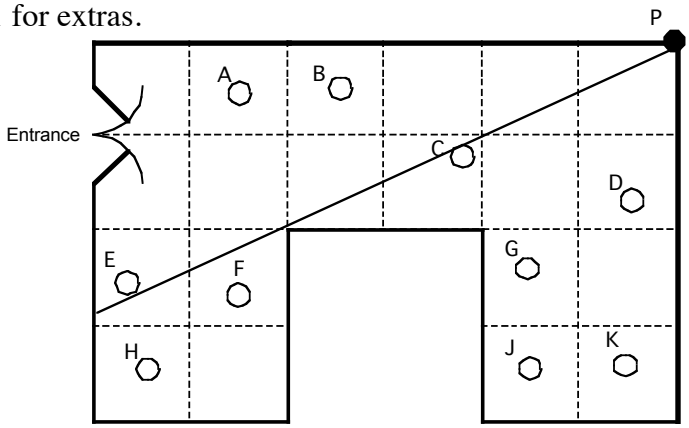
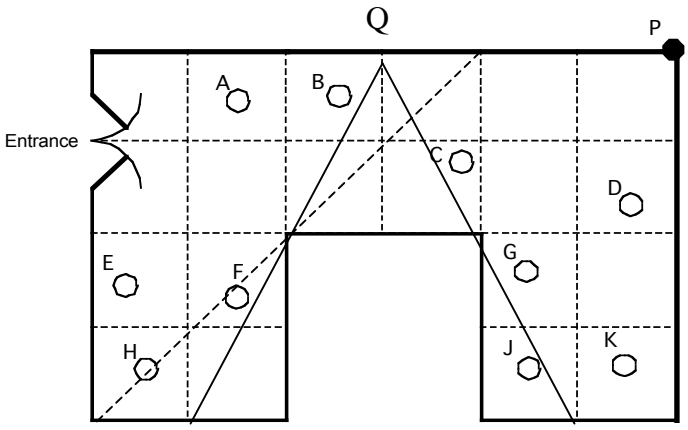
   Which people cannot be seen by the camera at P? Tell how you know.

Please continue your work on the page opposite.

Security Camera (continued)

2. The shopkeeper says that "15% of the shop is hidden from the camera"
   Show clearly that he is right.

3. Show the best place for the camera, so that the it can see as much of the shop as possible.
   Explain how you know that this is the best place

	Security Camera	Rubric	
		Points	Section points
1.	Draws a straight line from the security camera (P) to the opposite side of the room as shown. May describe the sight line. This line shows that F and H cannot be seen by the camera at P. Minus 1 for extras.  	1 2	3
2.	Correctly, shows/explains the area that cannot be seen by the camera. Three of the twenty squares cannot be seen 3/20 = 15%	1 1 1	3
3.	 Q can be placed one square left or right of the centre. The area of two of the twenty squares cannot be seen if the camera is placed at Q (or to the side of Q), the centre of the side. 2/20 = 10% *Partial credit* Correctly shows the area that cannot be seen but no calculation.	1 1 2 (1)	4
	Total points		**10**